Data Sheet 13
Risc PC for multimedia

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The Risc PC is ideal for multimedia applications. Every Risc PC comes with:

- full 24-bit colour capability
- up to 256MB RAM
- optional CD-ROM drive
- PhotoCD capability
- 210 or 420MB hard disc capacity fitted to standard models
- DEBI bus
- Stereo sound
- Replay - full-motion video playback

Full 24-bit colour

The new Acorn Risc PC offers a choice of up to 16 million colours, and you can have this choice at SVGA resolution (800 x 600 pixels) where 2MB of VRAM is fitted. If you need a higher resolution than this, you can choose up to 1280 x 1024 non-interlaced, even on a standard Acorn Risc PC with no VRAM fitted, in four levels of greyscale, or in 256 colours if you fit 2MB of VRAM.

There is also a specially designed 70Hz Replay mode of 480 x 352 pixels, for full-motion video. This can display up to 16m colours with 1MB VRAM and 32,000 colours without VRAM.

Industry-standard JPEG 32-bit colour images can be loaded into the Risc PC, decompressed on the fly and further processed as RISC OS sprites by the application ChangeFSI supplied with every machine. A hundred full-colour images are supplied with every machine to demonstrate its capabilities.

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Up to 256MB RAM

The Risc PC's powerful ARM 610 processor can address up to 256MB of memory, and although current technology limits its physical memory to 64MB using commercially available SIMMs, the Risc PC has more than enough RAM to load and manipulate the largest full-colour images, and combine them with text, graphics, video and sound.

Optional CD-ROM drive

The Risc PC has an empty 5.25" drive bay, ready to receive an optional CD-ROM drive providing a neat, integrated CD-ROM solution. Both RISC OS and (using the PC Card) DOS CD-ROMs can be used. Replay movies can be played from CD-ROM, and (subject to copyright) images copied from both RISC OS and DOS format discs, translated into sprites using ChangeFSI, edited and used in RISC OS applications.

PhotoCD support

The optional CD-ROM drive enables you to read Kodak PhotoCD-format discs, while the video performance of the Risc PC ensures that none of the original picture quality is lost. Once displayed on the computer, PhotoCD images can be edited and dropped into multimedia and publishing applications.

Up to 420MB hard disc capacity

With RISC OS out of the way in ROM, the Risc PC's standard 210MB disc is large enough to handle most data-intensive multimedia jobs. The 420MB model provides even more disc capacity, if it is needed.

DEBI bus

Multimedia often makes heavy demands on computers through video capture and sound cards. The data bus width has been increased from 16 bits on the A5000 and A540 to 32 bits on the Risc PC, and the processor address space expanded from 4K to 16MB, plus the original 4K. This greatly speeds up the transfer of data backwards and forwards between an expansion card and the main memory. The new DEBI (DMA Extended Bus Interface) bus on the Risc PC, as its name implies, also supports Direct Memory Access (DMA), so that data can be read from and written to system RAM by expansion cards, without interrupting the CPU. Together these features make it possible to implement even higher performance expansion cards for the Acorn Risc PC.

Stereo sound

Every Acorn Risc PC has eight channels of sound built into it. Sound samples can be stored in several formats - 8-bit linear, exponential, ADPCM and 16-bit linear for example.

The Risc PC features an improved noise filter, with a steeper cut-off at a higher frequency than before.

A number of sound sampling and MIDI interface cards are available, and a 16-bit CD-quality upgrade option specific to Risc PC has been developed.

The computer has a built-in speaker and stereo headphone socket.

Replay - full motion video playback

Replay - Acorn's full motion video system - is a world leader. It has made it possible for thousands of users to put together multimedia publications on Acorn computers at low cost. Replay's playback software, ARPlayer, is included with every Risc PC, together with a number of movies demonstrating the capabilities of Replay.

Extensive authoring software base

Acorn was an early adopter of multimedia techniques and a strong software base of multimedia authoring applications already exists. These enable you to combine full-motion video, audio, text and images in hypertext-linked documents which can be designed for interactive training, reference, project work or just plain fun!

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